**LISTING OF THE CLAIMS:**

1 – 28. (Cancelled)

29. (New) An isolated or substantially purified nucleic acid including a nucleotide sequence selected from the list consisting of:

(i) a nucleotide sequence encoding an ice recrystallization inhibition protein (IRIP) from a *Deschampsia* species;

(ii) a nucleotide sequence encoding an ice recrystallization inhibition protein (IRIP) from a *Festuca* species;

(iii) a nucleotide sequence set forth in any of SEQ ID NOs: 1-16, 18-21, 23-30, 32-37, 39-45, 47-53;

(iv) a nucleotide sequence set forth in any of SEQ ID NOs: 55-101 and 103-119;

(v) a nucleotide sequence encoding a protein which is a functionally active fragment or variant of a protein encoded by the nucleotide sequence set forth in any of (i), (ii), (iii) or (iv);

(vi) a nucleotide sequence which is complementary to the nucleotide sequence referred to in any of (i), (ii), (iii), (iv) or (v);

(vii) an antisense nucleotide sequence to the nucleotide sequence referred to in any of (i), (ii), (iii), (iv) or (v); or

(viii) an RNA sequence which corresponds to the nucleotide sequence referred to in any of (i), (ii), (iii), (iv), (v), (vi) or (vii).

30. (New) An isolated or substantially purified regulatory element selected from the list consisting of:

(i) a regulatory element derived from an IRIP gene from a *Deschampsia* species;

(ii) a regulatory element derived from an IRIP gene from a *Lolium* or *Festuca* species;

(iii) a regulatory element derived from a gene comprising the nucleotide sequence set forth in any of SEQ ID NOs: 1-16, 18-21, 23-30, 32-37, 39-45, 47-53;

(iv) a regulatory element derived from a gene comprising the nucleotide sequence set forth in any of SEQ ID NOs: 55-101 and 103-119;

(v) a regulatory element derived from a gene comprising a nucleotide sequence encoding a protein which is a functionally active fragment or variant of a protein encoded by the gene mentioned in any of (i), (ii), (iii) or (iv);

(vi) a regulatory element including the nucleotide sequence set forth in any of SEQ ID NO: 121 to 123;

(vii) a regulatory element including a nucleotide sequence which is complementary to the nucleotide sequence mentioned at any one of (i), (ii), (iii), (iv), (v) or (vi); or

(viii) a regulatory element including a functionally active fragment or variant of the regulatory element mentioned at any one of (i), (ii), (iii), (iv), (v) or (vi).

31. (New) A nucleic acid according to claim 29 wherein said *Deschampsia* species is *Deschampsia antarctica.*

32. (New) A regulatory element according to claim 30 wherein said *Deschampsia* species is *Deschampsia antarctica.*

33. (New) A nucleic acid construct including one or more nucleic acids according to claim 29.

34. (New) A nucleic acid construct including one or more regulatory elements according to claim 30.

35. (New) A plant cell, plant, plant seed or other plant part, including a nucleic acid construct according to claim 33.

36. (New) A plant cell, plant, plant seed or other plant part, including a nucleic acid construct according to claim 34.

37. (New) A plant, plant seed or other plant part derived from a plant cell or plant according to claim 35.

38. (New) A plant, plant seed or other plant part derived from a plant cell or plant according to claim 36.

39. (New) A method of modifying tolerance of freezing and/or low temperature stress in a plant, said method including introducing into said plant an effective amount of a nucleic acid according to claim 29.

40. (New) A method of modifying tolerance of freezing and/or low temperature stress in a plant, said method including introducing into said plant an effective amount of a regulatory element according to claim 30.

41. (New) Use of a nucleic acid according to claim 29 and/or nucleotide sequence information thereof, and/or single nucleotide polymorphisms thereof, as a molecular marker.

42. (New) Use of a regulatory element according to claim 30, and/or nucleotide sequence information thereof, and/or single nucleotide polymorphisms thereof, as a molecular marker.

43. (New) A preparation for transforming a plant, the preparation comprising a nucleic acid according to claim 29.

44. (New) A preparation for transforming a plant, the preparation comprising a regulatory element according to claim 30.

45. (New) An isolated or substantially purified nucleic acid including a single nucleotide polymorphism (SNP) from a nucleic acid according to claim 29.

46. (New) An isolated or substantially purified polypeptide selected from the list consisting of:

(i) an IRIP or IRIP-like polypeptide from a *Deschampsia* species;

(ii) an IRIP or IRIP-like polypeptide from a *Lolium* or *Festuca* species;

(iii) a polypeptide including an amino acid sequence as set forth in any of SEQ ID NOs: 17, 22, 31, 38, 46 or 54;

(iv) a polypeptide including an amino acid sequence as set forth in SEQ ID NO: 102 or 121;

(v) a polypeptide encoded by a nucleic acid according to claim 1; or

(vi) a functionally active fragment or variant of the polypeptide mentioned in any of (i), (ii), (iii), (iv) or (v).

47. (New) The polypeptide according to claim 46 wherein said *Deschampsia* species is *Deschampsia antarctica*.

48. (New) The polypeptide according to claim 46 wherein said *Lolium* species is perennial ryegrass (*L. perenne*).